



# **bulletin**

**of the  
mahoning  
county  
medical  
society**

**"Medicine is a sacred calling, and  
he who makes it ridiculous is  
guilty of sacrilege"**

**Sudhoff**

**october 1933**

**volume three**

**number ten**

# SUPERSEDING ANTISEPTICS and (CATHARTICS) in INTESTINAL TOXEMIAS

The futility of attempting to treat intestinal putrefaction with strong antiseptics and violent purgatives is well known.

Antiseptics strong enough to kill bacteria in the intestine are also likely to kill the normal symbiotic bacteria and also to have some effect on the mucosa.

Laxatives, cathartics and purgatives, likewise, are apt to be only temporary in effect.

Treatment of these low grade intestinal infections with KARICIN is a safe and rational procedure, because it combines adsorption of putrefactive bacteria and their products, detoxification and passive elimination in an efficient and effective formula.

KARICIN consists of colloidal kaolin, Soricin (purified sodium ricinoleate) and mineral oil in a fine emulsion. None of the ingredients is absorbed through the bowel, and no irritation is caused in their passage.

KARICIN neutralizes and eliminates pathogenic bacteria and their toxic products without interfering with the normal flora.

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If this tired, worried, over-worked mother were using Pablum for her babies' cereal feedings, she could have slept that extra much-needed hour instead of losing her temper while her children clamor for breakfast. For she can prepare Pablum in an instant, directly in the cereal bowl, simply by adding water or milk of any temperature—salt, cream and sugar for the older child and herself.

GETTING up an hour earlier in the morning is an inconvenience for most persons, but for the mother of young babies it is a hardship, sometimes almost tragic, frequently nullifying the best-planned pediatric advice.

This is especially true in the case of the nursing mother whose supply and quality of breast milk are affected by emotional shocks resulting often in agalactia and sometimes giving rise in the baby to diarrhea, colic, and even convulsions. Furthermore, the mother's emotional stress brings about a train of behavior on her part which is reflected in the child's psychologic reactions so that a vicious circle of bad habit formation is set up.

From this angle, the recent introduction of the pre-cooked form of Mead's Cereal, known as Pablum, assumes new

importance in the doctor's psychological handling of both mother and child, quite aside from its nutritional value.\*

Because Pablum can be prepared in a minute, the mother can sleep the extra hour she would otherwise be compelled to spend in a hot kitchen cooking cereal. Added rest means better poise, so that petty annoyances do not bring jaded nerves. Prompt feedings prevent many childhood tantrums, and a satisfied baby usually eats better and enjoys better digestion and growth.

\*Like Mead's Cereal, Pablum represents a great advance among cereals in that it is richer in a wider variety of minerals (chiefly calcium, phosphorus, iron, and copper), contains vitamins A, B, E, and G, is base-forming and is non-irritating. Added to these special features, it is adequate in protein, fat, carbohydrates, and calories. Pablum consists of wheatmeal, oatmeal, cornmeal, wheat embryo, yeast, alfalfa leaf, and beef bone.

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Turbidity P P M		0

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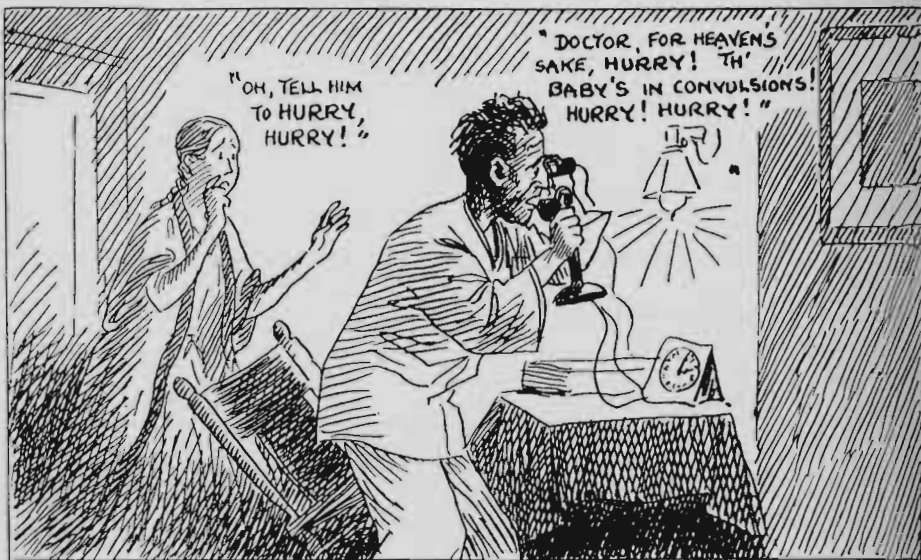
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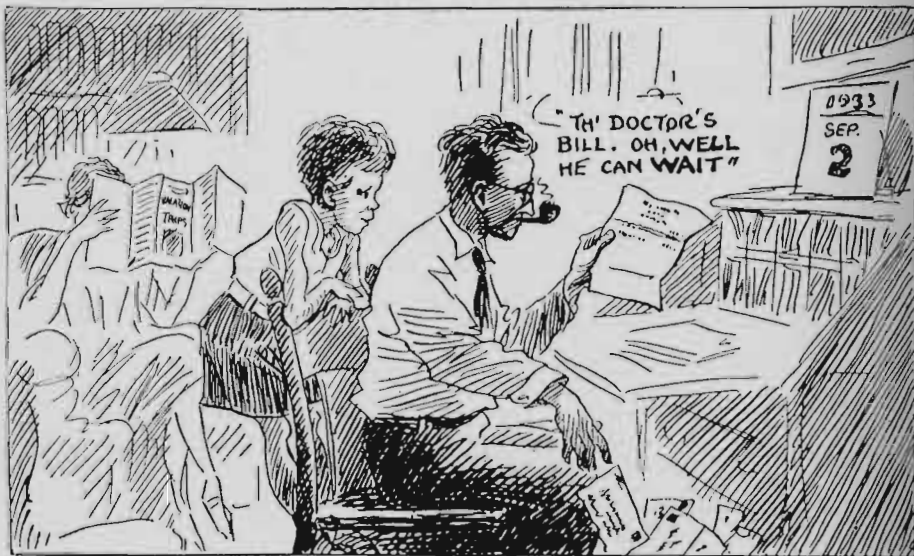
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Florence L. Heberding

**WAITING FOR THE DOCTOR AND MAKING THE DOCTOR WAIT**



*When it's important that the baby lives.*



*When it's unimportant whether the doctor lives.*

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## THE PRESIDENT'S PAGE

The Medical profession through its public relations activity is crystallizing a clearer conception of the public spirited activity of every individual physician. There is a place in civic affairs for the honesty and idealism of the medical trained citizen.

Medical contributions and the art of administering these contributions are essentially public spirited and too often gratuitous services. Nearly one hundred per cent of the hospitals in the country are administered to fulfill a public need and with no hope of making dividends. Nor are they organized with any such purpose as making money. Too often such contributions are made to a community uneducated to the relative value of things medical.

The National and local Scientific Societies are developing programs of public education and are insisting that the membership assume its place in civic activities. This social consciousness of the physician should become a more common attribute of our membership. The profession is sponsoring various phases of these activities when they sponsor scientific meetings, disease prevention weeks, health talks, health columns, etc. Such endeavors invite the public to view medicine in its true light. They point out the unknown assets of the body, and by prevention carry on the battle against disease and lengthen life. An enlightened public is learning more each year of these assets.

Another phase of civic duty is that of public office. Although we do not as a society endorse nor take partisan sides in political campaigns, we, as individuals, feel a measure of pride and satisfaction when a physician comes out for public office.

One of our members, H. E. Patrick, has allowed his name to be used at this time as a candidate for Board of Education. This is commendable and we, as individuals and citizens, are justly proud that a physician would seek to lend his ability to fill such office. The common sense of a medical man would be of great value in this civic duty.

*J Paul Harvey*



## SECRETARY'S REPORT

On September 5th, 1933, Council was called to order for the purpose of discussing the mild epidemic of Infantile Paralysis which had necessitated the closing of our schools. There was a good turn out of the members of Council and the matter was discussed thoroughly. It was the feeling of the men present that the Board of Health should be complimented on its action in closing the schools. Although the health authorities and the medical profession were subjected to some criticism from the local press, it was felt that our course was justifiable, because it is our duty to protect, if possible, the citizens of our community, more particularly the children who have no say in this matter. The articles appearing in the daily newspapers following this meeting were authorized by Council. It was suggested at this meeting that the Board of Health pool all blood of convalescent infantile paralysis individuals, the blood to be maintained at both hospitals and available to the profession of our City. This recommendation was forwarded to the Board of Health, with no reply from that body. This office has on file a number of names of individuals who have recovered from Infantile Paralysis, it is open for the use of any member of our profession.

The central office question was revived and a number of Councilors would like to know why nothing has been done in an attempt to organize this most important office. It has been laid on the table indefinitely, as far as we can learn, without any just reason.

The regular monthly meeting of the Mahoning County Medical Society was held at the Youngstown Club, September 19th, 1933. The guest speaker of the evening was Dr. George Curtis, Professor of Surgery, Ohio State University. His subject was "The Significance of the Iodine Content of Human Blood". Those who did not hear this address, which was very interesting and edu-

cational, are referred to the A.M. A. Journal of September 16th, 1933. Dr. Curtis' address demonstrates the tremendous volume of work that has already been done in the line of blood iodine content, and brings to light many interesting facts. First, that the iodine content of the blood and urine is a constant factor deranged in certain diseases. Second, that the blood and urine iodine can be changed by iodine feeding. He also leaves some unanswered questions. What is the cause of iodine diabetes? What is the relation of the blood dyscrasias and hyperthyroidism?

A report was received and accepted from the delegates, Dr. Jos. Rosenfeld and L. G. Coe, to the State meeting, excerpts of which are very interesting. "The house of delegates recommended an early return to the regular fees of the industrial commission and a lifting of the twenty percent reduction now in force". From Dr. Folansbees address: "He argued for representation on the Board of Trustees of Hospitals. He also took up the question of indigents, stating that the dispensary was a service offered for paupers and chronic indigents and he felt that it was the doctor's duty to take care of those indigents coming from his own practice."

The delegates recommend: "First, that we make it possible at our next election to elect, as alternate delegates, members of the Council and second, that the delegates be paid money expended by them for traveling, room and board, while attending the annual sessions of the State Association."

The report of the Medical Economics Committee was received without comment. It was accepted, the committee continued, and was given full authority to proceed with the plans. W. M. Skipp, M. D.

NOTICE:—Laboratory technicians will be permitted to take the haematology course free of charge, on written request from the doctors employing them.

## THE MANAGEMENT OF POST-PARALYTIC ANTERIOR POLIOMYELITIS

After the lightning-like bolt of Acute Anterior Poliomyelitis has struck the patient, the work of reconstruction and rehabilitation commences. Convalescent serum, spinal drainage, or medication are no longer of any value. Treatment then becomes a matter of physiotherapy and biophysics.

### Acute Paralytic Stage

This phase of the disease commences with the appearance of the paralysis and ends four to six weeks later with the cessation of muscle tenderness. The tenderness is accepted as evidence that there is still spinal cord activity of the infection present. This tenderness may be prolonged beyond the usual time by neglect or ill-advised treatment. During this stage the doctor must hold the relatives in check since meddling therapeutics have to be avoided. This means prohibition of massage, exercises and manipulation.

However, the doctor may examine the patient briefly; enough only to determine the gross distribution of the involvement. This distribution may be found in various combinations, but in general 35% of patients have both legs involved, 22% one leg involved, 6% one arm involved.

The prognosis during this stage, as to life, depends on the severity and location of the paralysis. The mortality runs approximately 15%. The prognosis, as to the final extent of the paralysis, can not be estimated. Approximately 27% recover completely, much of course depends on the proper treatment.

Therefore, during this stage of the paralysis and tenderness, the patient must be at absolute rest. Metal or plaster splints applied should prevent deformities at the ankle, knee, and hip. Boards must be placed underneath the mattress to prevent sagging which might cause hip and back deformities. The patient should not sit up, because sitting requires muscle action against gravity. If an upper extremity be involved it too must be splinted to prevent stretching of the paralyzed muscles. If

paralysis of the bladder is present it is taken care of in the usual cord-bladder manner. Fortunately this latter condition rarely endures for long. Nothing else is done.

### Convalescent Stage

This phase commences with the disappearance of muscle tenderness and continues through the period of recuperation. The most marked improvement appears in the first six months but continues in diminishing proportions for three years. More active treatment may be instituted during this period. First, deformities still must be prevented if possible. Deformities are caused by (1) force of gravity, (2) unopposed action of active muscles, (3) habitual malposture, (4) functional use. Second, as the paralysis disappears the muscles can be carefully exercised. Fatigue of a weakened muscle is detrimental, since a partial paralysis may be changed to a complete one by overuse.

Frequent examinations will now determine the extent of muscle power improvement. Braces should be worn to prevent deformities due to weakness, and to utilize whatever muscle power remains. The musculature of the affected limb is stimulated and strengthened by heat, massage, and active exercises. Swimming and muscle re-education in a tank of water are of great value. Electrical stimulation has its advocates but much care must be taken to prevent overuse. It is during this stage that one can prognosticate what form of locomotion the patient will have.

During this stage in particular, and for years afterwards, one should examine the spine, since scoliosis, a most serious sequel, may develop. The occasional comparatively long period of latency in the development of paralytic scoliosis makes early diagnosis possible but difficult. A child who had infantile paralysis at four may not develop scoliosis until ten. From no deformity progress may be rapid to the extremes of the paralytic type. Prophylaxis is much easier than treatment.

**Chronic Residual Stage**

The last phase commences from the time, usually two to three years, when no further improvement is noted and continues thus through life. Further muscle training is of no avail, consequently the damage done will always remain. During this stage either braces or operations are the only form of treatment. Braces worn at this time must be continued throughout life unless replaced by operative means.

Operations for the residual paralysis may be divided into (1) correction of deformities; (2) tendon transplantations; (3) stabilizing

joints that can not be voluntarily controlled. Usually combinations of these three measures are employed. Many times a series of operative procedures is deemed necessary; first to correct the deformity and then to improve locomotion by reconstructive surgery. Men of our time on this continent such as Whitman, Soutter, Hoke, Mayer, Gallie, Steindler, Campbell and Abbott have been among the foremost in the world in devising operative means for combating the deformities that Anterior Poliomyelitis leaves in its wake. Truly they are "menders of the maimed".

C. S. Lowendorf, M. D.

**MEDICAL GLEANINGS**

The following members of our society attended the State meeting in Akron, September 6th, and 7th: Drs.

Karl W. Allison, M. H. Bachman, John U. Bachanan, W. H. Bunn, C. H. Campbell, C. R. Clark, L. G. Coe, Louis S. Deitchman, George Y. Davis, W. H. Evans, J. L. Fisher, R. D. Gibson, M. B. Goldstein, J. P. Harvey, Charles D. Hauser, J. A. Heeley, John Heberding, A. V. Hinman, O. D. Hudnutt, P. H. Leimbach, M. P. Mahrer, Anthony C. Montani, R. R. Morrall, James B. Nelson, Gordon G. Nelson, Dean Nesbit, Claude B. Norris, David B. Phillips, Guy A. Parillo, F. F. Piercy, R. B. Poling, J. Rosenfeld, Wm. M. Skipp, W. X. Taylor, O. J. Walker, C. F. Yauman.

Drs. E. C. Goldcamp and J. E. Lewis, Jr., have just returned from Providence, R. I., where they were the guests of the Providence General Hospital. Dr. Lewis presented a paper while there on "The Upper Urinary Tract During Normal Pregnancy".

Drs. W. X. Taylor, R. R. Morrall and E. C. Baker have just returned from Washington, D. C., where they attended the Tumor Clinic under the direction of Dr. Bloodgood.

Dr. W. Z. Baker is recuperating at home from a very serious operation.

Dr. H. E. Welsh is still confined to his home.

Dr. B. B. McElhaney is convalescing at the Mayo Clinic in Rochester, N. Y. He is expected home this week.

The annual picnic on Sept. 28th was a disappointment. Many of those who made reservations failed to attend. Those who were there enjoyed the day.

Dr. E. C. Goldcamp won the French Lick Golf Trophy of the American Academy of Oto-Laryngology and Ophthalmology, during the week of Sept. 11th.

Dr. L. H. Beers who is convalescing at his home on Madison Ave., will be delighted to see any of the boys.

Dr. G. B. Kramer and the staff of the Youngstown Hospital held a Clinico-Pathological conference in the nurses' lecture room of the South Side unit on Tuesday, September 26th, at 8:15 P. M. It is planned to hold these conferences every last Tuesday of each month. Physicians will be welcome to these meetings. Notices will be posted on the Hospital bulletin boards.

## AVERTIN, A BASAL ANESTHETIC

Since the introduction of the first general anesthetic, in 1846, medical science has been searching constantly for the ideal anesthetic, which in the words of Reuben Peterson should: (1) induce anesthesia as gently and naturally as sleep itself (2) not irritate in its administration or elimination (3) make the awakening of the patient as natural as from a deep sleep, without nausea, headache or intestinal paralysis, and (4) produce sufficient relaxation for the performance of the operation desired without the operator fighting abdominal muscles or intestinal coils.

In considering any anesthetic, the safety of the patient is always kept uppermost in mind. During the eighty odd years which have elapsed since ether was first used, many methods have been developed for rendering the patient insensible to pain. Halstead introduced local anesthesia in 1885, and Corning at this time introduced spinal anesthesia.

The use of an anesthetic substance by rectum was first advanced by Pirogoff in 1847, but the method did not receive much popularity. This was due to the fact that there were many cases of rectal and colon irritation following the use of rectal anesthetics. In 1923 Duisberg and Willstater prepared tribromethanol for rectal administration. In 1925 Butzengeiger presented this anesthetic before the Berlin Surgical Society, but in 1927 Eicholz demonstrated its true anesthetic properties. Since then about 250,000 cases have been reported in Germany, England and the United States.

Chemically, tribromethanol or tribromethylalcohol, is a white crystalline substance with a melting point of about 79 degrees centigrade. It is readily soluble in water at 40 degrees C. At about 45 degrees C. its molecular structure breaks down forming dibromacetaldehyde, which is highly toxic and irritating to rectal mucosa. This was probably the substance responsible for the large number of rectal and colon irritations reported during the first year or two of its use. In the technique now used this substance can be de-

tected by adding a few drops of the solution to congo red, and if the undesirable substance is present a blue color appears. This test must be carried out before each administration of the anesthetic. Avertin fluid, as the anesthetic is known commercially, is a solution of one gram tribromethylalcohol in one cubic centimeter of amylene hydrate. It should be kept from light and air, and is therefore dispensed in dark, tightly stoppered bottles.

There has been considerable experimental work done on the effects of avertin administration. Waddel has studied the effect of avertin on excised and intact tissues, and states the following conclusions: (1) Avertin manifests a definite action on both voluntary and nonvoluntary muscle. (2) When applied directly to voluntary muscle, it decreases the irritability and produces a rigor-like phenomenon. (3) After absorption into the blood stream, it does not affect skeletal muscle substance directly, but effects relaxation through nervous depression. (4) Avertin depresses all kinds of nonvoluntary muscle, both on direct application and after absorption into the blood stream. (5) The depressant effects in the intact animal are exhibited more uniformly and more acutely on the bladder, rectum, and uterus. He further states that avertin does not qualitatively alter the reactions of tissue to nerve and muscle stimulants and depressants. Also, the changes in the blood pressure may be due to depression of the arterial muscle, the vasomotor center, or the heart; or to a simultaneous depression of two or more of these. Finally, no permanent damage is produced in tissue even by high concentration of avertin, recovery being prompt on withdrawing the drug.

Bruger and his co-workers studied the effects of avertin on liver and kidney function in dogs and humans. In dogs they found that the drug produces a slight but transient liver damage. Of course, the dosage used on the dogs was quite large. The test used was that which depends upon the removal of bromosulphthalein from the blood by the

liver. In two human cases there was no dye retention twenty-four hours after administering of 100 mgm. of avertin per kilogram of body weight. In the studies on the effects of avertin on kidney function, it was found that there was always an anuria occurring immediately after its administration, and lasting for a period varying between fifteen minutes and one hour, after which marked oliguria occurs. The urea excretion is always diminished for the first four hours, but within eighteen to twenty-four hours the absolute output is about normal. This short period of anuria is obviously due to kidney depression or a fall in blood pressure.

It has been noted that in all cases there is some depression of respiration, in that the respirations are slower and shallower, but the respiratory efficiency is maintained by an increase in the tidal excursions. This respiratory deficiency is greatly improved by carbon dioxide inhalations or the administration of lobeline. Bruger and his co-workers by determinations of the pH found that there was a mild acidosis in the great majority of cases. It was similar to the acidosis produced by amytal and ether in that it is associated with an increase in the phosphoric acid output and also a disturbance in lactic acid metabolism. Other workers have shown, however, that anoxemia produces a more marked acidosis than has been observed in any other condition, and it is probable in the case of avertin that the profound degree of anoxemia due to the respiratory depression may play an important part in the production of the acidosis. Nevertheless, in the experiments carried out it was found that a mild degree of acidosis occurred even in the animals in which little or no cyanosis was present.

Avertin is very rapidly absorbed, about eighty per cent of the drug being absorbed in the first twenty minutes. At this time it reaches a concentration in the blood stream of about seven milligrams percent. As it passes thru the body it is detoxified by combination with glucuronic acid and excreted in this form by the kidneys. The toxic dose is about

five tenths of a gram per kilogram of body weight, and the anesthetic dose about 100 to 150 milligrams per kilogram of body weight. This gives a therapeutic index of about 2, which is higher than any other anesthetic substance.

It has been found that when ether and avertin are combined there is less toxicity than when either is used alone. There is no effect on the conjunctivae, cornea or gastro-intestinal tract. There is no damage to any of the parenchymatous organs, and some experimental animals have been subjected to over one hundred anesthetic inductions with avertin, over a short period of time, without showing any demonstrable changes in any of the organs. Guttman reports that several of the animals in his series became pregnant and gave birth to normal litters during his investigation.

Anesthesia occurs very rapidly. The average length of time is about seven minutes. Generally, the experience has been that the patient becomes drowsy in about two minutes, and is sound asleep in six or seven minutes. There is no excitement stage. Tendon and pupillary reflexes become weak and the pupils are contracted. There is a complete relaxation of muscles of the entire body. The pulse rate increases slightly. The average fall in systolic blood pressure reported, is ten to twenty millimeters of mercury. In one of our cases, the blood pressure fell to seventy, systolic, over a diastolic pressure of forty, about one-half hour following the administration of the anesthetic. The pressure rose quite promptly to one hundred ten, systolic, after giving the patient one-half ampule (3/8 gr.) of ephedrine sulphate. It has been generally found that the blood pressure will restore itself as anesthesia progresses.

The question of preliminary medication is arbitrary. Morphine sulphate in doses larger than one-sixth grain causes greater interference in an already depressed respiratory center and therefore caution is advised. On the previous evening, sodium amytal may be given to procure a restful night. It is well to

(Continued on page 14)

## TABLE OF OPERATIONS

This table will show at a glance a few facts about some of the operations which have been carried out under avertin. Under the heading marked "time" is listed the interval in minutes which elapsed from the beginning to the end of the supplementary anesthetic. It will be noted that the operations were quite varied. The stimulant used in almost all the cases was ephedrine sulphate.

Age	Operation	Time	Supp. Anes.	Stim.	B. P. Before Op.	B. P. After Op.	Dose
51	Gall bladder	40"	Gas	Ephed.	130/90	82/58	50%
40	Bi. Herniae	52"	Gas	0	124/82	96/80	50%
51	Appendix	41"	Gas	Ephed.	110/70	86/70	50%
29	Hysterectomy	60"	Gas	0	136/70	126/70	50%
21	Breast tumour	16"	Gas	0	100/60	85/50	50%
27	Appendix-Susp.	37"	Gas	0	124/78	88/60	50%
50	Gall bladder App.	31"	Gas	Ephed.	120/90	78/48	50%
39	Hysterectomy	47"	Gas	Ephed.	140/90	98/67	50%
53	Radical Breast	47"	Gas	0	118/60	100/60	50%
37	Hysterectomy & Gall bladder	58"	Gas	0	100/64	98/58	50%
33	Ruptured ectopic	45"	Gas	0	100/60	90/50	60%
72	Hernia appendix	30"	Gas	Ephed.	120/80	70/54	50%
46	Repair & Hyst.	50"	Gas	Ephed.	168/90	104/68	50%
40	Repair & hemorrhoid	40"	Gas	Ephed.	114/76	80/60	50%
45	Gall bladder & Ventral hernia	78"	Ether	CO <sub>2</sub> O <sub>2</sub>	120/82	120/78	50%
50	Hysterectomy	45"	Gas	0	140/95	100/70	60%
17	Dental cyst	30"	None	0	136/70	116/40	100%
82	Ileo-colostomy	50"	Gas	Ephed.	145/90	88/48	40%
71	Cholecystectomy	35"	Gas	0	120/64	98/60	50%
36	Repair	29"	Gas	0	160/115	110/70	50%
53	Explor. Lap.	35"	Gas	0	158/96	104/60	50%
52	Radical Breast	32"	Gas	Ephed.	152/90	90/60	50%
35	Repair & Hysterect.	52"	Gas	0	180/90	100/60	50%
42	Hysterectomy	45"	Gas	Ephed.	108/68	70/50	50%
54	Pelvic abscess	40"	Gas	0	136/68	100/50	50%
24	Appendectomy	18"	Gas	0	100/70	90/50	50%
46	Radical Breast	48"	Gas	0	152/80	110/68	50%
53	Cholecystectomy	47"	Gas	Ephed.	126/76	100/50	50%
46	Hysterectomy	52"	Gas	Caff.	110/80	106/60	50%
39	Gall bladder						
	Appendix	36"	Gas	0	118/78	106/60	50%
73	Radical Breast	35"	Gas	Ephed.	146/86	100/40	50%
74	Ovarian cyst	28"	Gas	0	204/120	155/100	50%
49	Bi. Herniae	38"	Gas	Ephed.	100/70	70/58	50%
37	Cholecystectomy	43"	Gas	0	124/84	112/74	50%
34	Cholecystectomy	40"	Gas	0	140/86	100/60	50%
40	Hysterectomy	38"	Gas	0	120/80	90/55	50%
38	Cholecystectomy	59"	Gas	0	120/76	108/70	100%
37	D & C	4"	Gas	0	120/70	112/64	80%
29	Appendix	17"	Gas	0	122/72	102/62	50%
32	Breast tumour	20"	None	0	130/80	100/60	100%
63	Gastroenterostomy	72"	Gas	0	120/80	100/60	50%
53	Hyst. & Gall bladder	50"	Gas	0	112/70	120/60	50%
55	Epulis	25"	None	Ephed.	124/80	70/40	100%



(Continued from page 12)  
have the lower bowel well cleansed with enemata.

The drug is dissolved in distilled water at 40 degrees C. to make a 2.5 to 3 percent solution. A small rectal tube should be used, and the solution given slowly, about five minutes being taken to administer the entire amount. The room should be darkened, and all noise excluded. The sphygmomanometer cuff should be in place before starting the anesthetic in order that blood pressure readings may be taken at frequent intervals.

The dose should be reduced in advanced liver disease with ascites, kidney lesions, pulmonary tuberculosis with cavitation, bronchiectasis, colon and rectal lesions, and obesity. The above are considered as contra-indications to the use of the drug. The anesthetic was used in one of our cases presenting a post-operative cicatricial atresia of the common duct with severe jaundice and an enormous liver due to the blocking. This patient was given a basal dose and showed no ill effects from its use.

Children and healthy adults will

tolerate larger doses. Nitrous oxide and oxygen, and ether may be used as supplementary anesthetics but very little is needed. The patient awakens following operation with very little difference from ordinary sleep. There is no nausea or vomiting. Some of the patients have complained of headache.

In summarizing, it is readily seen that tribromethylalcohol or avertin, is a forward step in the search for the ideal anesthetic. It is applicable to almost every branch of surgery and obstetrics. In the latter field many cases have been reported, and not a single untoward reaction has occurred in either mother or child. I believe that the best way to use the drug is to administer a dose large enough to produce basal anesthesia and supplement this with gas or ether to produce surgical anesthesia, in this way eliminating the dread of inhalation anesthesia which every patient has.

G. G. NELSON, M. D.

Grateful acknowledgement is made to Dr. J. A. Sherbondy for his advice and assistance in preparing this article.

## IN THIS ISSUE

Dr. F. F. Monroe continues his interesting series of articles on Panama and tropical medicine.

Dr. W. D. Coy contributes a lovely bit of philosophical poetry which was inspired by the homely bitter-sweet.

Dr. C. S. Lowendorf writes on the sequela and complications of poliomyelitis and their treatment, a timely and logical follow up on Dr. E. R. Thomas' article in the September issue.

Way back in the Pre-N. R. A. era, the Bulletin had an anonymous colyumist who wrote pithy quips under the pseudonym "S-Q-Lapius". He lapsed into silence for a while, but is now staging a comeback. We are glad to have him back with us.

In his letter to the editor, our good friend George Madtes, with becoming pseudo humility, ostensibly flagellates himself and does penance. This is in response to an editorial by Dr. Scofield in our September issue, in which Charlie took exception to one of George's editorials on "polio" in The Vindicator.

You will note however that each time George says "mea culpa" and smites his breast, he tries to clip Charlie on the chin, on the rebound.

Knowing Charlie's propensity for polemics, we can expect to hear from him. So far, the second round goes to George, but we are willing to lay a few rupia (or is it rupees?) on kid Charlie to take the third round. Watch the fireworks.

Dr. G. G. Nelson has a very excellent article on "Avertin".



**Inter-State Post Graduate Assembly**

**October 16 to 20, inclusive**

**Public Auditorium, Cleveland, Ohio**

**OCTOBER MEETING**

of the

**MAHONING COUNTY MEDICAL SOCIETY**

**Thursday, October 26th, 8:15 P. M. Sharp**

**YOUNGSTOWN CLUB**

**This Will Be a DOUBLE HEADER**

**I. DR. WILBERT C. DAVISON**

Dean, Duke University Medical School, Durham, N. C.

Subject:

**"Intestinal Diseases of Childhood"**

**II. HAEMATOLOGY**

**The first lecture in the series.**

NOTICE:—Those who do not find it convenient to enroll for the entire haematology course are invited to attend this lecture, without obligation.

**HAEMATOLOGY COURSE**

After the first lecture in this course, on Oct. 26th, at the Youngstown Club, the remaining seven will be given every Friday evening, at 8:15 P. M., beginning Friday, November 3rd, at the Y. M. C. A., on North Champion Street. Registration fee for entire course, three dollars.

## THE MAHONING COUNTY MEDICAL SOCIETY BULLETIN

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Published monthly at 243 Lincoln Ave., Youngstown, Ohio.  
Annual Subscription \$2.00

## "POLIO" IN RETROSPECT

The "Epidemic" of poliomyelitis, which was really no epidemic, since the number of cases came within a high seasonal expectancy, is now in the past, and we can, with a sigh of relief, regard it dispassionately for what it was worth.

Without rancor, we can say that the panicky feeling, which prevailed for some time, was not started by us. We blame no one. Newspapers do not always see medical matters in the same light as we do; they are apt to see "news value" and front page copy in matters which we can regard without excitement. It is just a difference in viewpoints, both of which may be honest and sincere.

After the public became panicky, it was good judgment to delay the opening of schools until the seasonal peak of the disease passed, and the number of cases showed a definite decline. The flurry of cases, as a matter of fact, ran a course that could be predicted from previous observations of many similar situations.

About the scientific evidence regarding the etiology and mode of transmission, which was brought forth in order to show the futility of quarantine: the truth is that neither is definitely established. The preponderance of opinion seems to be that it is a contact disease. As such it calls for quarantine and the other measures which were instituted here. It is best to be on the safe

side. For that matter, the etiology of scarlet fever and the mode of transmission of leprosy have not yet been indisputably established, nevertheless, no one would advocate abolishing quarantine for these diseases.

As for the schools, it is unfortunate that their plans were somewhat interfered with, and that it has cost the city money. But, if the course pursued by the health authorities and the medical profession has been instrumental in saving but a single life, it was not too high a price to pay.

In general, the management of the "polio" flurry here leaves no need for apologies on our part or regrets, except that there is still so much to be learned about the disease. No one is more keenly aware of these hiat than are we. We hope that in time they will be filled in. Until then, the best we can do is to use the knowledge we now possess, and the good common sense that the Lord gave us.  
L. D.

Do not forget Dr. H. E. Patrick in the November election. He is candidate for Board of Education. He is not running as a candidate of the Medical Society or of any group. But as a man eminently suited for the position, we should boost him whenever we can.



## THE SCIENTIFIC PROGRAMS

Our Society exists for several purposes, but one of these is by all odds the most important. Far beyond everything else, the Society's main function is to continue the *education* of its members. All the scientific programs, regular and special, serve that purpose. Considered apart from Medical Knowledge in general, special training is mechanical, uninspiring, often quite misleading, and at times not very useful. But related to the whole field of medicine, and to other limited fields, special training becomes effective.

No matter in what line one may happen to be working, the scientific programs are valuable, and in no case should be neglected. It would be well if all papers presented were

printed in the next succeeding Bulletin,—that I favor,—but there is no substitute for being present at the meetings and hearing the discussions from the mouths of those presenting them.

One of the gratifying things about the Mahoning County Society is that the members come to hear and to learn. One eminent doctor on our program recently remarked upon the seeming eagerness of our group "to get everything I said". There is nothing that so stimulates a speaker to give his best as a good attendance. Let us each one remember this every time,—and in that way we shall always find it easy to get the best to come to us.

C. B. N.



## "POLIO" POLEMICS

Editor The Bulletin, Sir:—

Charley Scofield's editorial in The Bulletin leaves the impression that my "polio" editorial in The Vindicator was the height of naivete. But shucks, Mr. Editor, I have been much more naive than that. For instance, I once sat in a poker game with Dr. Scofield. Eddie Goldcamp had to lend me carfare home.

But it's rather a pleasure to be taken for a ride when one gets such a skillful whirl. And then again, you remember you have been after me to write something for The Bulletin, and I couldn't imagine what a layman could write for a medical journal without merely demonstrating the already well-known fact that there are more *caudae equinae* than there are *horses*. Now this denudation by Charley gives me a chance to write you an *apologia pro culpa mea*. I shall tell all—or nearly all—and the confession will give you medical fellows a moment's idle amusement in contemplating the mysterious workings of a lay mind when it considers a medical matter.

The best and shortest explanation of that editorial would be the one given by the inebriated individual

who jumped into the fountain, namely, that it seemed a good idea at the time. Why did it seem a good idea? Well, at the time five "polio" cases were reported suddenly from an area of three blocks along Southern Boulevard. At the same time there were as many more cases scattered singly about—one on Arlington St., one on the East Side, etc. The city and managing editors, in their lay wisdom, thought the concentration in the small area looked suspicious; there seemed at least a possibility that some common factor was involved.

In their naive way, the editors turned to the medical authorities. In the 1932 Medical Year Book they found a report by Dr. Edward C. Rosenow of a severe epidemic which he studied in a mid-western college. You remember Dr. Rosenow, Mr. Editor; you went to hear him lecture at Canton, not long ago. Well, at the college, for reasons which space forbids detailing but which seemed adequate to the lay mind, the milk supply was suspected. New cases ceased abruptly when precautions were taken with the milk. Of course this may have been a mere coincidence.

The editors also had before them Dr. M. J. Burrows' statement (Arch. Int. Med., 1931, vol. 48, p. 33) that "in the greater number of cases in man the disease enters apparently by way of the intestinal or gastro-intestinal tract". Dr. Burrows did a series of 50 autopsies in the big Baltimore epidemic, and you doctors say that the pathologist has the last word. Then, too, the editors considered the medical report on the Kansas epidemic, showing that of 433 families involved, only 19 had multiple cases.

To the wisenheimer newspaper men, thinking there might possibly be a common factor in the Southern Boulevard sector, and noting the medical reports cited above, it seemed a good idea at the time to get the health commissioner to ask the medical society to consider whether it would try looking for a common factor.

Yes, it seemed a good idea at the time. But since then we have Dr. Scofield's assurance that attempts to discover the cause and mode of transmission of "polio" by the medical society would be useless. Maybe he's right.

The society has appealed to the public for blood of convalescent victims, and yet Dr. Newton Kugelmass, the New York pediatrician, says that "convalescent serum from

persons in contact with cases of frank poliomyelitis possesses the power in equal or greater degree than from those who have actually been ill". And further: "Serum from normal adults never in contact with known cases of the disease seems to possess neutralizing power at least equal to that of persons known to have been in contact. Moreover, normal adult serum appears to be more potent than serum of convalescents." (International Clinics, vol. 1, March 1932.) Yes, no doubt Dr. Scofield is right.

Joking aside, Dr. Scofield certainly is right in saying that the job, if it were to be undertaken at all, is the province of the public health authorities—but we won't go into that here.

There, Mr. Editor, is your horrible example of the lay mind's meanderings. No doubt it shows thalamic hypertrophy and cortical atrophy. But you know some people never learn better than to rush in, and next time a stimulus prods my emotional center, probably I shall try prodding the medical society again. Fortunately for me the society is kind-hearted and long-suffering, though sometimes it must echo the old prayer: "Good Lord, protect us from our friends". For I assure you the laymen were trying to be friends.

GEORGE R. MADTES.

## S. Q. LAPIUS OBSERVES

That's right, Mr. Ford, N-ever R-elinquish: A-nything.

Wish that folks would appreciate the possibilities of scarlet fever, measles, whooping-cough, diphtheria, small-pox, etc., as they did of infantile paralysis.

Sure we'll do our part, General Johnson, and what a relief it'll be. You see, heretofore we've been doing our part and, as regards indigents, the entire community's part also. Now we'll only have to do our part.

Only two passengers were killed on American air-lines during the first half of this year. It is presumed that they just stepped out to take a smoke.

Vice-Admiral Standley is designated as "Chief of Operations". I'd think that the Surgeon-General would resent that.

Then again, too much inflation does result in a blow-out, doesn't it?

Headline mentions "The re-birth of the liquor business". Well, that certainly won't be a dry labor.

The way it appears, about six more states are going to be admitted to the bar early next month.

Einstein's new theory is that perhaps he is not welcome in Germany.

Did you ever try to concentrate while someone was pushing a carpet-sweeper in the room?

## MEDICINE IN PANAMA (continued)

By F. F. MONROE, M. D.

Ancon Hospital, (now Gorgas Hospital) was established by the French Canal Company, Sept. 17, 1882, on the slopes of Ancon Hill, near the Pacific terminal. At first it was comprised of twelve frame buildings. The staff consisted of French physicians; the nursing corps was placed in charge of the Order of St. Vincent.

There are few more beautiful sights in the world than its grounds and the surrounding vistas, with its drives lined with stately royal palm trees, towering above the blue waters of the Pacific Bay, and lying to the north, the smoky mountains of the Continental Divide. French taste selected the site, a French nun planted the first trees and shrubs, and nature completed the majestic picture.

In their zeal for the comfort of their patients, the French unwittingly bred the yellow fever mosquito by placing the legs of the hospital beds in basins of water, to prevent ants from molesting the patients. In these basins the deadly *stegomyia* was bred and yellow fever was spread from patients suffering from the disease to surgical cases in the wards, and even to the staff of the hospital. Unscreened windows and doors also contributed to the spread of yellow fever and malaria.

During the eight years of the French regime, when the average number of employees was 10,500, the estimated death toll was placed as high as 22,000. General Gorgas, in a Los Angeles address, gave the following instances which came within his personal knowledge: "One of the French engineers, who was still on the Isthmus when we arrived in 1904, stated that he came over with a party of seventeen young Frenchmen, within a month they had all died of yellow fever except himself. The superintendent of the railroad brought to the Isthmus three sisters, within a month all had died of yellow fever. The Mother Superior of the nurses in Ancon Hospital told me that she came out with twenty-four sisters, and within a year twenty-one had died, most of yellow fever."

The Americans developed Ancon Hospital until it included fifty buildings, arranged around the side of Ancon Hill in pavilion style; frequently 1500 or more patients were accommodated. The hospital staff, American doctors all, numbered around thirty-five, with about one hundred and twenty-five American graduate nurses. The various departments of medicine, surgery and the specialties were represented. A well equipped Board of Health laboratory was maintained, which took care of the general work of the Canal Zone, as well as that of the cities of Panama and Colon. There were various departments of pathology, bacteriology, chemistry and research; autopsies were routine; smaller laboratories were placed about the various sections of the hospital for general ward work. Beginning in 1915 and reaching its completion in 1918, a modern reinforced concrete and steel hospital of one thousand beds capacity was built. By an act of Congress the name of that hospital was later changed to the Gorgas Hospital.

The convalescent medical and surgical cases from the American wards were transferred to the Taboga Sanitarium, which was located on an island about fifteen miles in the Pacific Bay. This was an ideal location, with less rainfall than the mainland, excellent bathing beaches, and made a very wonderful spot for rest and recuperation. Medical and nursing care were furnished these patients.

The American employee was allowed annually thirty days of sick leave and a forty-two day vacation with pay. This vacation had to be taken in the United States each year, as we soon realized that the men from the northern climates required these annual periods of rejuvenation, if they were to be equal to the task before them.

### Dysentery

This disease contributed a large portion of our hospital population. As we all know, there are two types of dysentery, amoebic and bacillary. Amoebic dysentery is an infection

due to the *entamoeba histolytica* and occurs in cold as well as tropic or subtropic countries. The cyst is undoubtedly the propagative stage of the *entamoeba*; the vegetative form and the cysts are excreted in the feces; the cysts are much more resistive, and on being ingested with food and water readily set up a new infection. Individuals who have never had dysenteric symptoms have passed virulent cysts and are a great menace to a community. The

membrane. Ulceration may invade blood vessels, the organism being carried to the liver with resultant liver abscess. Here the abscess may be solitary or multiple, which occasionally rupture into the peritoneal cavity, or perforate the diaphragm causing an abscess of the lungs. I have seen one case of metastatic brain abscess of amoebic origin.

Symptoms of amoebic dysentery may be gradual, less frequently sudden, accompanied by moderate ten-



Ancon Hospital, Panama. Royal Palms in Foreground. First floor, Ward 15, of Yellow Fever fame, was built by the French. Dr. Gorgas lived on the second floor.

vegetative form may be ingested but seldom results in infection, being destroyed by the digestive juices.

Primarily, the pathological lesion is confined to the large bowel, and ulcerated areas may be found throughout. Ulcerative bacillary dysentery produces an acute diffuse inflammation, while amoebic dysentery, even in an advanced stage, leaves unaffected islands of normal mucous

esmus, abdominal pains and no nausea or loss of appetite. If untreated, symptoms may subside, only to recur in a short time. In other words, intermittent attacks of diarrhoea should call attention to this disease. There are fulminating cases in the tropics with marked toxemia, but they are not common. The patient, as a rule, does not have the severe symptoms as seen in the average case of bacillary dysentery.



There is as a rule elevation of temperature. There are three points of tenderness: over the caecum, transverse colon and sigmoid regions, with frequent discharge of pus, blood and mucus, and rectal tenesmus. There may be little or no abdominal pain in contradistinction to bacillary dysentery.

Treatment of amoebic dysentery: emetine has become almost a specific, especially in the first attacks, where it frequently gives brilliant results. Unfortunately relapses are not uncommon, especially in the older cases. Emetine is used by hypodermic injection extensively in place of oral administration; bismuth subnitrate in dram doses, every four hours, was used in most of our cases before the emetine preparation came into use. One attack of amoebiasis does not protect the individual against subsequent infections.

In liver abscess of the amoebic origin, emetine should be used by injection for several successive days, if the symptoms permit, and if not relieved by this method surgery should be quickly resorted to.

#### Bacillary Dysentery

Bacillary dysentery occurs throughout the whole world, but conditions in the tropics are more favorable for its propagation.

Etiology: bad sanitation, factors that are liable to impair resistance of the individual such as chilling, enervating tropical heat and privation. Contamination of food and water, with the fly acting as carrier, is the most important source of infection. The bacillus of Shiga and other groups classified by Hiss, into three, Flexner-Strong, Hiss-Russell or Y, according to the fermentation of the various sugars, are the bacteriological varieties.

The Clinical Types are: (A) Acute, (B) Toxic or Fulminating, (C) Relapsing and (D) Chronic.

The mild type with an incubation period from two to seven days, may be a mere diarrhoea.

The acute type varies. The onset may be sudden, with gripping pains in the abdomen, followed by diarrhoea; mucus appears in the stool early, within 24 to 48 hours, patient passing typical dysenteric stools of pus, mucus and blood, ten to twenty

times a day, with marked tenesmus, temperature of 102 or over, vomiting, marked toxemia and drowsiness, rapid dehydration and tenderness over the entire abdomen with marked distention. In children and elderly patients rapid emaciation may occur, death resulting even in the ordinary moderately mild type. In the toxic or fulminating form, severest symptoms are seen early. Vomiting, dehydration, collapse and death may follow in rapid succession.

There is also a gangrenous form with rapid and fatal termination. The mild recurring and chronic bacillary dysentery may extend over a period of years, as frequently seen after wars, resulting in chronic invalidism.

Arthritis is said to be one of the commonest complications. Treatment: prophylaxis is the most important thing, routine examination of food handlers for carriers, proper sanitary precautions, fly prevention, proper water supply and other measures to secure clean food. Vaccines have been used in military bodies, but are of questionable value. Treatment is symptomatic; serum treatment has been advocated and saline solution to combat dehydration.

#### DEFICIENCY DISEASES

Under this heading may be mentioned Pellagra, Scurvy and Beriberi. These are food deficiency diseases, caused either by specific lack of an essential vitamin or a badly balanced diet of a low protein content.

##### Pellagra

The experimental work of Joseph Goldberger, U. S. P. H. S., led to the conclusion that Pellagra is essentially of dietary origin.

The characteristic symptoms of Pellagra: The vague digestive symptoms of these patients are due to the inflammation of the entire gastrointestinal tract, the mouth, tongue, the oesophagus, stomach and bowels. In the female the genito-urinary tract, especially the vagina, is also inflamed.

There is a characteristic skin lesion in this disease, which begins as an eruption on the back of the hands, forearm, the forehead, neck and feet, at first as an erythema resembling ordinary sun burn. This



skin lesion is symmetrical and gradually grows darker and desquamates. Occasionally it may undergo a secondary pyogenic infection. The eruptive condition may persist from weeks to months and has a tendency to recur in spring and fall, the end result being a cure or an atrophic scarring of the skin. It is observed that the eruption of Pellagra is as a rule found on the parts of the body exposed to the sun. The most pronounced digestive symptoms are stomatitis and diarrhoea, in 75% of the cases, and achylia gastrica in about 45% of the cases.

Symptoms referable to the nervous system such as headache, depression and sleeplessness, mental changes, in about one-third of the cases, ranging from mere apprehensiveness to an actual dementia are common. There are also cases that show symptoms of spinal cord changes.

The prophylaxis as well as the treatment of this disease appears to be largely a problem of nutrition and the eradication of any underlying disease such as chronic malaria, dysentery, hook worm, syphilis and chronic alcoholism.

The diet should be general, varied and well balanced as regards protein, carbohydrates and fats, meat, eggs and milk being essential, as well as fruits and vegetables. Yeast has also been used in recent times. Of the drugs, arsenic and dilute hydrochloric acid, the latter in dram doses, especially if associated with achlorhydria, are of benefit.

### Beriberi

This is a deficiency disease due to lack of certain substances, (Vitamin B) characterized clinically by multiple neuritis, oedema and cardiac weakness. This disease was noted in the Chinese in Panama, where rice was a staple article of diet. There was also a highly fatal infantile type of Beriberi, but there was a question as to its origin. Autopsies of these infants showed large fatty livers and enlarged right hearts.

Prohylaxis: The prophylaxis seemed to be the under-milling of rice, and bread of whole wheat flour; beans, peas and similar legumes, whole barley should be used in the preparation of soups, also fresh meat,

eggs and milk, avoiding the use of canned foods.

### Scurvy

Scurvy was unknown to the tropics as a local disease, but was seen occasionally, being brought in from incoming ships. The absence of the infantile form can be explained by the fact that the native mother always nursed her young and the white mother had the advantage of the antiscorbutic food, all other adults ate sufficient quantities of fresh fruit and vegetables to prevent scurvy.

Rickets is unknown in the tropics, due to the ultra-violet irradiation furnished by the bright sun-light, the lower class child frequently going naked. By the earlier observers the absence of rickets was credited to the abundance of fruits in the tropics.

### Filariasis

The anophelene and culicine mosquitoes serve as intermediate hosts of this disease. Many of the filaria cases were without symptoms. The microfilariae are found in the blood, but their appearance in the peripheral circulation in large numbers occurs only after midnight. If a fresh drop of blood is taken, and the low power lens of the microscope is used, they are very easily seen tossing about among the red blood cells; the female filaria is 50 to 65mm. in length and 1.5 to 2mm. in width.

When symptoms are present their nature depends upon the location and the degree of infestation. The filaria may produce a lymphangitis, febrile reaction, enlargement to the lymphatic glands, swelling and oedema of the affected part. When it occurs in the leg, marked swelling follows and a chronic condition results, known as elephantiasis. The scrotum may attain enormous size; chyluria is a frequent finding, due to the blocking and rupture of lymph vessels into some part of the urinary tract. Microscopically the urine shows many fat globules and many red blood cells. There is no specific treatment for this disease.

### Leprosy

Leprosy is not uncommon on the Isthmus and the country in the native born. The U. S. Government

maintains a leprosarium on the mainland across the Bay from Panama City. About one hundred patients are kept there living contented and happy; there is a physician, male and female nurses, and some four or five other employes always in attendance. There is a teacher for the children, and the lepers are always employed for any thing they are able to do; they are paid for this work so as to encourage them to seek it. They have their own chapel, commissary and gardens. Amusements are provided, radios, moving pictures, etc., by the local clubs and churches of the Canal Zone.

The diagnosis is made chiefly by the lesions of the skin and the smears taken from either the nodule or the nasal septum. The bacillus of leprosy resembles that of tuberculosis; most of our cases were of the nodular type, but occasionally

one of true anaesthetic leprosy was seen. For the treatment chaulmoo-gra oil offers a little hope, but the greater number of them die a wretched death, or succumb to some intercurrent disease, tuberculosis probably heading the list. One of the last duties I performed in Panama, was that of serving on a board of three, which made a careful medical survey of these cases.

#### Scarlet and Rheumatic Fevers

Scarlet and rheumatic fevers are practically unknown in the tropics; the streptococcic infection is much less frequently seen than in the temperate zone. There is a peculiar superficial lymphangitis or erysipeloid infection seen, which as a rule, affects the lower extremities. An elderly Spanish Catholic Priest, one of our hospital chaplains, had this type of erysipelas eight or ten times, during my stay at Ancon Hospital.

(To be concluded)

## REPORT OF COMMUNICABLE DISEASES, SEPT., 1933

	Youngstown	County	Campbell	Struthers	Muni. Hosp.
Chicken Pox .....	3			1	
Diphtheria .....	4	2			
Measles .....	1				
Scarlet Fever .....	22	1	1	1	
Whooping Cough .....	48	7	5	6	
Polio Myelitis .....	20	4		1	2
German Measles .....		1			
Typhoid Fever .....	10	2			
Tuberculosis .....	20	7			
La Grippe .....	1				
Gonorrhoea .....	1				
Syphilis .....	6	1			1
Tetanus .....	1				

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## DULCAMARA

Beside our doorway grows a vine  
That 'round a frail support will twine  
Its woody stems to reach the eaves,  
A hardy plant whose three-lobed leaves  
Are cleft at base and stand apart  
Like auricles of the human heart.  
Its modest blooms of purple hue  
In clusters hang half hid from view,  
And scarlet berries too are seen  
Amid the thrifty branchlets green.  
This plant from o'er the sea was found  
Sending its rootlets into ground  
That once received man's touch of care  
And then showed ruin everywhere.  
Gone were the hands that once had sown;  
Gone were the hearts that once had known  
The cares and loves that life will meet; —  
They left for me this bitter-sweet.

Like later sons of pioneers,  
It carries legend through the years.  
Though homesteads go, for loss or gain,  
To mark their site it will remain  
And bear as then its modest bloom  
As if it would dispel the gloom  
That gathers with the somber thought  
Of what great change the years have wrought.  
Here ripened fruit and flowers grow;  
How few are men who this can know!  
What promises our memories flood  
As we view droplets red as blood!  
As tribute to a changing land,  
We hold these flowers in our hand.

Life's cup is also in our hand;  
And drink we must, nor understand  
Why it must be so bitter-sweet.  
It may be long ago a fleet,  
Unnoted moment came and went,  
As if on secret mission bent,  
So quickly we had then not known  
That seeds of bitterness were sown.  
It may be we have tilled the ground  
And nurtured plants which we have found  
Bear not the fruits which we desired  
When ardent youth our hopes inspired.  
Yet we are also native soil  
That nourishes while some despoil.  
Some fruits are ours and other's too;  
We blend the old traits with the new.

An unseen chemist fills the cup  
Which we must drink. We lift it up;—  
And if in leisure or in haste,  
The mixed decoction that we taste,  
As cares seem long and joys seem fleet,  
Has much of bitter with the sweet.  
It may be in the riper years  
When we have known a brave man's fears,  
When sorrows that from them have grown  
Replace the joys our youth had known,  
And life with these seems well filled up,  
We find some tear-drops in the cup.

Warren Deweese Coy, M. D.

## St. Elizabeth Hospital Granted License

St. Elizabeth Hospital has received official notice from the State of Ohio that the hospital is licensed to care for state orthopedic cases.

Attention is called to the fact that all gunshot wounds, stab wounds and other wounds caused acts of violence, are to be reported to the police as soon as possible and not later than within twenty-four hours after the wound was inflicted.

Through the courtesy of the Chicago Tribune, we are able to reproduce McCutcheon's cartoon in this issue. We are also thankful to the Chicago Medical Society for the use of their cut. Anyone desiring to get a larger reprint of this cartoon, suitable for framing, send six cents in stamps to the Business Manager of the Chicago Tribune.

## DR. H. E. PATRICK

Candidate for

## BOARD OF EDUCATION

The support of the Medical Profession will be appreciated.

## Hallowe'en Party for Doctors' Assistants

Glen Eden Inn — 8:30 P. M.

## THURSDAY — OCT. 26

Fun—Bridge—500—Games—No Post Office  
Refreshments at Midnight

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—Adv.

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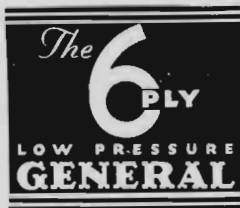
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	1st D.	2nd D.	3rd D.*
Severe cases	3 oz.	6 oz.	9 oz.
Medium cases	10 oz.	15 oz.	20 oz.
Mild cases	15 oz.	30 oz.	60 oz.

(\*) Until the proper amount for their age and condition is reached, which is 200 c. c. per kilo of body weight per twenty-four hours, or three ounces per pound of body weight per twenty-four hours. However, the total twenty-four hour intake need not go above thirty-two to thirty-five ounces or 960 to 1050 c. c.

After 48 hours or when the stools become normal, ALERDEX (Protein-Free Maltose and Dextrins) should be added gradually, beginning with one ounce to the quart, and increasing until the infant is gaining steadily in weight. In certain cases, it may be necessary to increase the carbohydrate to a total of 12 to 15% (3 to 4 ounces of carbohydrate to the quart).

—Adv.



# Announcing CAPSULES OF SMACO CARITOL

**I**N response to demand by physicians, small Caritol capsules are now available in packages containing 25 and 50 each, identified as Smaco 500. Each capsule represents 5 drops of Caritol (0.3% carotene in oil). The liquid form, of course, is still available (Smaco 505).

Caritol capsules provide an easy way to measure doses and are especially recommended for individuals who object to drops.

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## HELPS BUILD RESISTANCE

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## ALSO CAPSULES OF CARITOL WITH VITAMIN D

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**BOTH UNITS** are approved by the American Medical Association, American College of Surgeons, and our Training School has been approved by the State Board of Registration for Nurses. The facilities of our hospitals are open to physicians who are in good standing in their respective County Medical Societies.

"Pathological laboratories of both units are fully equipped for tissue, clino-pathological and medico-legal diagnosis.

"The Roentgen Ray departments are equipped for diagnosis, superficial and deep therapy, and for radium therapy. Diagnostic work includes roentgenography and fluoroscopy. All fracture fluoroscopy is done with shock-proof apparatus. In roentgenotherapy, the department has the most modern aids for measuring dosage and quality of radiation."